Puerperal Fever #1

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An Essay

on Puerperal Fever

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Those diseases to which women, are peculiarly subject, form so considerable and important a portion of the practice of a physician & those especially connected with pregnancy, are so very interesting to him that they have particularly drawn the attention of medical men to the means most proper to alleviate them. The duty imposed on them by their creator for the continuation of mankind; subjects them to more than an equal share of the miseries that afflict

the human race; consequently they have a very great claim not only on the sympathy of medical men but on their particular attention; since we find in every period of time exertions have been made many of which have proved succes=ful to alleviate their distress: yet there remains an extensive field for improvement.

The subject chosen for the following dissertation, is the child-bed or puerperal fever. This disease appears to have been known to physicians in early times, and has been decribed by numerous writers at various periods under different names; by some it has been considered as an inflammation of the uterus, omentum or peritonæum; others have attributed it to a suppression of the lochia; and by a few it has been considered as owing entirely to an undue secretion of milk. Although there has been such a variety of opinion among practitioners respecting the cause of this disease, yet all agree that it is often dreadful in its

nature and fatal in its issue. There are many melancholy testimonies of its fatality and the uncertainty of every method of cure that has been proposed. On the authority of Doct. Young we find this disease very fatal at Edinburg as late as the year 1774, and he informs us that almost every woman as soon as she was delivered was attacked with the disease and that not one recovered, although every method was tried to cure the disorder. Doct. Rush also tells us that death from puerperal fever was very common between the years 1760 & 1776 in Philadelphia.

It is not surprising that a disease which forms so considerable a portion of the complaints of puerperal women, and which is so remarkable for its fatal termination, should have excited the attention of physicians; we consequently find that medical men began very early to investigate its nature and find means to prevent

its ravages.

That so little progress has been made in the knowledge of those diseases which attack child bearing women, must be attributed to the imaginary theories of the puerperal state that have been taught and received.

We are apt to neglect simple truth for the mere inventions of the mind that may be created at pleasure: but "let it be remembered that the slightest remark drawn from real observation, is of more utility and gives greater satisfaction to a judicious enquirer, than the most extensive theory of causes drawn from hypothesis alone".

Although much has been said against theory in medicine, yet it has been considered by some as the greatest desideratum in the science of medicine, to have a theory established on the solid base of accurate observation. I believe that such a theory has been deduced from observation, since experiment the only test of truth

has taught us that it leads to a successful treatment of disease.

The theory I allude to, teaches that disease consists in a morbid or irregular action of the system, and that this irregular action by the varieties in its force, the difference of its seat, and the greater or less time of its duration, produces all the numerous diseases incident to the body. It rejects the idea of prescribing for the name of a disease, and confines the attention of the physician to the state of the system.

History. There is no subject in medicine perhaps, concerning which, there has been a greater diversity of opinion than puerperal fever; by the greatest number of authors it is considered as of a low putrid nature; by others as highly inflammatory; by our own country-men it it is generally considered as a disease of increased action, but frequently the inflammatory action passes into the typhous state, which

may be known by the pulse becoming frequent small and quick, a great inclination to sleep, clammy sweats, torpor of the alimentary canal, & tremors

The period of time at which this disease attacks the patient, is very uncertain, sometimes she is free from all symptoms of the disease for a week after parturition; but the most frequent time of attack, is on the second or third day after that event.

It almost always comes on with a cold stage, accompanied with the usual signs of fever, as great thirst, pain in the head especially over the eye-brows. The skin is hot and dry, sometimes partially moist. The tongue at first, is furred and white, but becomes covered with a dark crust. The pulse varies, sometimes small, at others full and tense, and generally very frequent from 100 to 120. Wandering pains are felt in the belly, with great anxi-

-ety and restlessness.

As the disease advances the whole abdo-
-men becomes affected with excruciating pain,
and so extremely sore to the touch, that even
the bed clothes by their weight cause great
distress; and at the sametime a swelling
generally commences which sometimes increas-
-es so rapidly that in a very short time the
woman appears as large as before delivery.

Respiration is performed with great difficulty,
the breathing being short and laborious from compres-
-sion of the diaphragm. There is likewise much
pain in the back, hips and lower extremities;
and swollen legs are frequent attendants.

The face is sometimes flushed, but gene-
-rally pale, and has a sorrowful appearance; every
word or action expresses her suffering both of body
and mind. Great prostration of strength, dejection of
spirits, with watchfulness; carelessness about her
child, and no desire to suckle it.

Great nausea and vomiting often attend, which sometimes becomes so violent as to prevent the smallest quantity of food or medicine remaining in the stomach; the matter discharged, is of a dark colour and frequently of a disagreeable smell. The bowels are also much disordered, they are generally costive at the commencement, but as the disease progresses a diarrhoa often ensues; the stools are generally dark and fatid.

Violent delirium seldom happens, but when the system has almost sunk under suffering and pain the faculties of the mind become deranged. The patient is much disturbed in sleep by frightful and distressing dreams, and they awake in great anxiety.

If the disease attacks the patient before the milk has been determined to the breasts, it seldom appears; but if it has been secreted, it is seldom suppressed, but is generally lessened in quantity, and

Stage

much altered in taste and colour.

The lochia are seldom suppressed but as the disease progresses becomes much altered in quality and quantity.

The urine is small in quantity, is evacuated frequently with great pain, and is high coloured.

Blood drawn from a vein has different appearances, depending on the violence of the disease. Doct. Leak found it always sizy; and sometimes it is dissolved.

The patient generally loses her appetite at the commencement of the disease.

In sleep the eyes are half closed, and the mouth remains generally open.

The pulse now sinks; the sweats become cold and clammy; the lips, teeth, and tongue, are covered with a black crust; rigors return; aphthae cover the whole internal surface of the mouth and fauces; derangement of mind; involuntary discharges of faces; cold extremities

convulsions and death closes the melancholy scene.

Such is the course of puerperal fever; although it may be varied according to the constitution of the patient, the degree of violence, and the earlier or later attack of the disease.

Puerperal fever generally terminates in a short time, if no assistance is afforded; for it is supposed that one half of those who are attacked with it, die on the fifth day. There are cases however in which death does not occur until the fourteenth day; and in others again on the second day after the attack of the disease.

If the disease terminates favourably; the recovery will be very tedious, and the patient require great care and attention.

The symptoms considered as favourable to life, are the reappearance of the lochia when it has been suppressed, the gradual subsidence of the swelling and soreness of the abdomen, with a moist skin.

Remote and Predisposing Causes.

The remote cause of this disease, are all such as produce debility in the system generally and in the uterus locally, for debility is the only predisposing cause. That debility is the predisposing may be inferred, 1st from the disease attacking the patient shortly after parturition, when the system has been debilitated by the previous labour; 2nd from its attacking those females most frequently who are of a very delicate make and constitution; 3rd from its being very frequent in those who are subject to violent passions of the mind; and 4th by its generally attacking the patient in the evening when the body is most weakened.

The remote causes may be divided into local and general; the local act on the uterus directly, and the general indirectly through the medium of the system.

I shall first notice the local causes that

produce debility in the uterus, by acting directly on it. There appear to be injuries done to the parts by very difficult or preternatural labour; harsh treatment of the accoucheur during parturition; violence offered in extracting the placenta, and pressure on the uterus, by bandages applied too tight to the abdomen.

I now proceed to mention the causes that appear to produce debility through the medium of the general system.

Many of the modes and customs of civilized society may be considered as causes producing this disease. Improper fashions, such as wearing tight corsets; and apparel too light for the changes in the atmosphere; Errors in diet, stimulating drinks, confined air, heat from too great quantity of bed clothes, or epidemic constitution of the atmosphere, may all be considered as causes producing predisposition through the medium of the system.

Therefore when this predisposition exists in the system generally and in the uterus locally, and any of the exciting causes act upon it they produce morbid or irregular action in the sanguiferous system, and this irregular action falls with greater force on the uterus and surrounding parts, on account of the accumulated excitability which exists in them after parturition.

Exciting Causes. The causes which excite this disease, are all such stimuli as act on the system when predisposed to disease; and many of the causes before enumerated as remote, may prove the exciting cause. Some of the causes before noticed may account for its always attacking the patient directly after parturition when the system has been weakened and its excitability increased; hence when any stimulus is applied disproportioned to the excitability in the system,

it proves the cause of morbid action, which is determined to the uterus by finding there the weakest part in the body, and it is this local predisposition, which invites irregular ~~[illegible]~~ or morbid excitement; as certainly, to use the words of Dr Rush, as the electric fluid is attracted by the rod.

Admitting the uterus, as before mentioned to be the weakest part in the body; it therefore is my saying that the disease is seated in the uterus; for we are well aware that when the body is labouring under debility, it is so very liable to disorder that the weakest stimuli may sometimes produce disease; and if any part has a greater degree of weakness than another, it is this part the disease will first attack and shew itself.

Viewing the body in this state, when the smallest impression takes effect, we may readily conceive the influence that head pain

too great quantity of bed-clothes, stimulating drinks, pressure on the uterus by bandages applied too tight to the abdomen and obstructed perspiration, may have in producing this disease; which is violent and fatal only in proportion to the remote predisposing and exciting causes; and without the last no disease can be produced, for they are the causes of the morbid and irregular action which produces the proximate cause of puerperal fever.

Proximate Cause. The cure of the disease depends very much on a knowledge of the proximate cause; therefore when we recollect how fatal this disease is to puerperal women, it is not surprising that it should excite physicians to attempt to discover the proximate cause; we accordingly find various opinions advanced on this subject. But in this disease as in many others the effect has been considered as the cause. We therefore find that a

suppression of the lochia, impeded secretion of milk, a simple inflammation of the uterus, or peritoneum have all been considered as the cause.

That a suppression of the lochia is not the cause may be inferred, from its sometimes continuing through the whole course of the fever of a natural smell and appearance. It may also be inferred that an impeded secretion of the milk, is not the cause, from the disease frequently attacking the patient, before the milk has been determined to the breasts, or if it has no morbid change has taken place in its appearance.

It has been supposed that an inflammation of the uterus or peritoneum is the cause by the general system sympathising with those parts; but it may more readily be considered as the effect of increased and irregular action of the sanguiferous system determined to those parts by debility; I therefore would conclude that the proximate cause of this disease, in an excess of

morbid action of the arterial system but exhibit=
=ing marks of being seated in the uterus, by finding
there the greatest degree of debility. The appear=
=ances in the neighbouring parts are the effect
of sympathy from the contiguity of situation.
Why debility in a part should make it more
liable to disease when the whole system is
under the influence of increased arterial action
will not appear difficult to explain. When a
part is weakened and the sanguiferous system
very much excited, that part being unable to bear
the impetus of the blood, is certainly most
exposed to disease.

Appearances on dissection. on dissec=
=tion the morbid appearances are principally
confined to the abdomen; but sometimes the
thorax exhibits marks of disease. On opening
the abdomen you sometimes find a quantity
of purulent or serous matter. The uterus and
its appendages, with the omentum and peri=

toneum exhibit inflammatory appearances; the bladder and intestines often shew marks of disease; sometimes these parts are mortified. These appearances are sufficient proofs of its malegnant nature, and its being seated generally in these parts.

Cure. Having concluded the history and causes with the appearances on dissection. I now proceed to the curative part of my subject.

In a disease so violent in its attack so rapid in its course, and generally so fatal in its termination; every exertion should be made as early after the attack as possible to prevent its progress.

Unfortunately the same diversity of opinion that has existed among physicians concerning the cause and nature, have existed also respecting the remedies to be employed in the cure of this disease.

Under such a diversity of opinion, it will be best to pursue that method of treatment which the state of the system or existing circumstances seem most to indicate.

As it was noticed before that this disease changes frequently from the inflammatory to the typhus state; the remedies to be employed for the cure of it, must be divided into classes suited to these opposite states of the system.

The remedies for the inflammatory state of this fever, are all such as by their operation on the system, diminish the excessive action of the blood vessels; and such as prevent local congestion and serous effusions in vital parts.

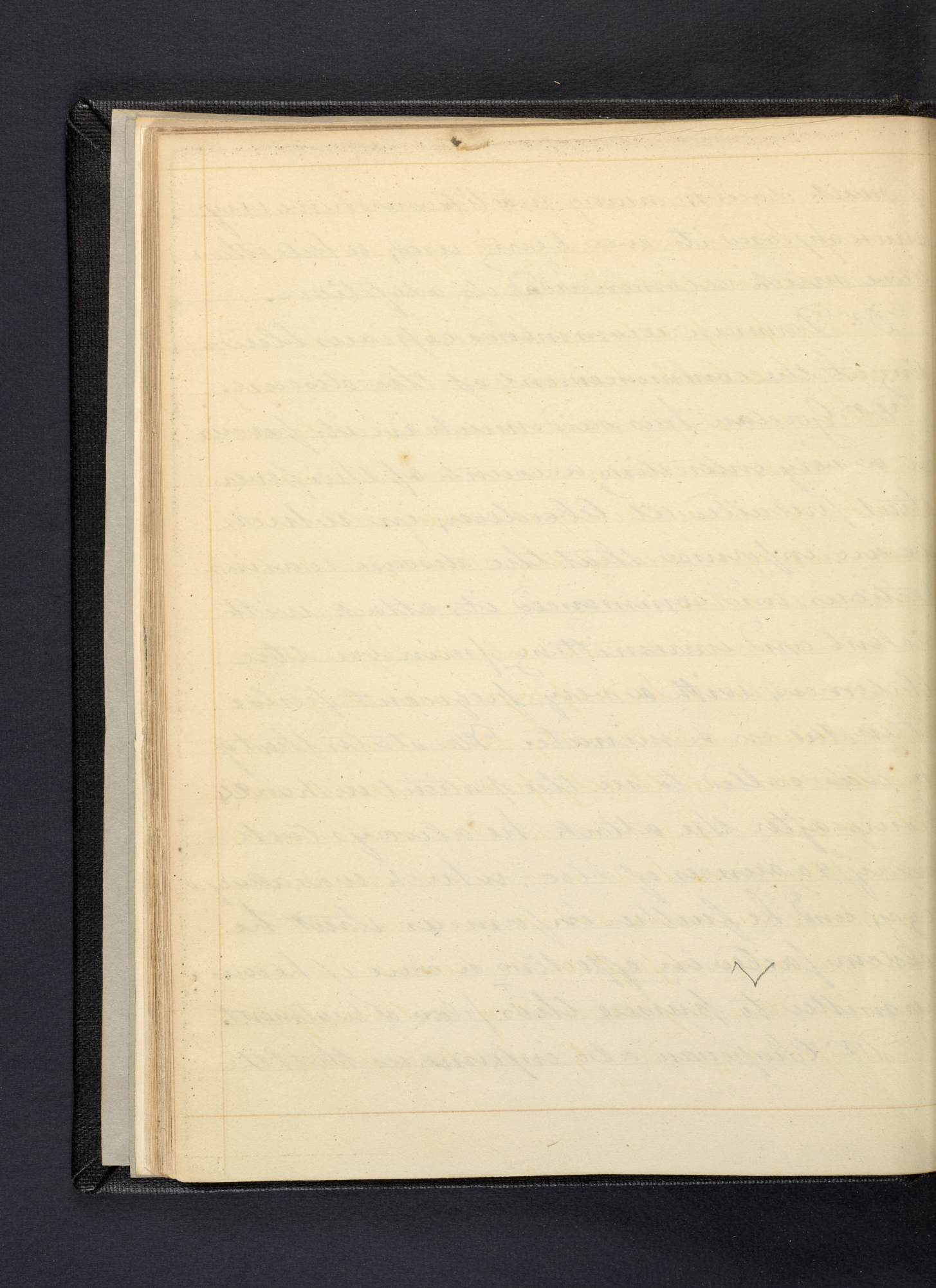
The first and most important of these remedies that I shall mention, is bloodletting. The propriety of bloodletting in this fever has admitted

of much doubt; many practitioners have very much opposed its ever being used; while others have much recommended its adoption.

Dr. Denman recommends copious bleeding at the commencement of the disease.

Dr. Gordan has said much in its favour in a very interesting account of this fever that prevailed at Aberdeen; in which we are informed that the disease was infectious, and commenced its attack with violent and unremitting pain in the abdomen, with a very frequent pulse after 140 in a minute. He states that if he was called to see the patient within 24 hours after the attack he always took away 20 ounces of blood, which was always sizy; and he further informs us that he seldom failed in effecting a cure if he was permitted to pursue this plan of treatment.

Dr. Chapman also informs us that the



remedies which succeed best in his hands, were bleeding freely, purging actively, and blistering the abdominal region.

The propriety of bloodletting in this disease is established beyond controversy by the success of many eminent practioners in medicine; and when we see so many instances recorded of its inefficacy, we may attribute it to an improper use of the remedy as to time and quantity.

To lay down precise rules as regards the time it should be employed, and the quantity to be drawn would only tend to misguide the practitioner and thereby produce much mischeif; but in preference to this method which some physicians have advised, and which is undoubtedly erroneous, I shall recommend its being employed when depression or tension in the pulse, or the inflammatory action of the bloodvessels requires it, and the quantity to

be taken must be regulated by the continuance or removal of those signs which calls for the remedy, and by its beneficial effects on the system.

Bloodletting if properly used in this disease is one of the most efficacious remedies. but if injudiciously employed its is injurious and often produces fatal effects.

Cathartics are the next remedy that engages our attention, respecting them there has been as much diversity of opinion as ~~exists~~ about bloodletting. Some physicians observing that women who die of this disease, are frequently troubled with a diarrhea, and those considering it a very dangerous symptom have very much opposed their ever being used. While others considering it a favourable symptom recommend the use of purgative medicine. That purgatives are useful in this disease will certainly be admitted when we recollect how injurious costiveness is

to the body in health, and this would im=
=mediately lead us to obviate it in disease.

By exhibiting cooling laxatives and emol=
=lient glisters, and keeping the bowels open
by them, we prevent the accumulation of
acid matter and thus prevent the conse=
=quence of a spontanious diarrhea, which
sometimes prevails in this disease without
being useful, but often injurious. These
mild medicines should be distinguished from
the more powerful purgatives, which if
exhibited might produce a too copious dis=
=charge, or diarrhoea and thereby hasten
the patients death.

In the next place I shall notice
Emetics. Some physicians have trusted
exclusively to them for the cure of puer=
=peral fever.

Mr Doulcet of the Hotel Dieu at Paris
who was one of this number and who

relied entirely on ipecacuanha, made it his practice to exhibit an emetic immediately after the attack and often repeated it.

Emetics if properly employed may be consider=
=ed as a very valuable remedy in this disease.
But to depend on them entirely would be very improper; and those who rely on them alone for a cure will frequently find themselves very much disappointed in their expectation. When they are given as auxilliaries to other remedies great advantage may be expected from them.

The milder emetics may be exhibited with advantage to evacuate the stomach of any offensive matter it may contain; besides this operation "they lessen the fullness of the blood=
=vessels, by determining the serum of the blood through the pores; and they equalize the ex=
=citement of the system, by inviting its exces=
=sive degrees from the bloodvessels to the stomach and muscles."

When the inflammatory action of the arte=
=rial system is very considerable emetics should
not be given until this is reduced, as they are
found to be always injurious in fevers of high
arterial action.

They may however be administered with
great advantage in small doses, so as to produce nau=
=sea and determine to the surface of the body and
by these means remove internal congestion and
lessen the morbid action of the bloodvessels.

Blisters are the fourth and last remedy
that I shall mention for the inflammatory
state of puerperal fever. They are a very valu=
=able remedy in many diseases, and may be ren=
=dered very efficacious in this disease, if their
application be regulated by existing circum=
=stances; if the inflammatory symptoms of the
disease are violent they should be lessened
before the application of blisters. If this
precaution be taken, blisters are of great

service in relieving pain and difficult respiration.

Blister may also afford great service by indu=
=cing an artificial inflammation on the surface of the body and thereby invite the disease from internal to external parts and by these means lessen the danger of visceral congestion.

Blisters may also be employed with great advantage when the disease is verging on the typhus state, and the patient so weak as to rendr it dangerous to use a greater degree of depletion. Blister will be found equally benefi=
=cial whether applied to the abdomen or extre=
=mities.

Remedies for the Typhus State of Puerperal Fever. When this fever assumes the typhus form which may be known by the symptoms before discribed, such remedies are to be employed as by "exciting action in the stomach, bowels, brain, nerves, muscles and skin equalise the excitement of the whole

system, and thereby indirectly destroy a weak but morbid action in the bloodvessels by imparting to them more vigorous and healthy action."

The remedies for producing this effect on the system are denominated Stimulants and these are divided into internal & external.

The internal stimulants are opium, distilled and fermented liquors, ether, peruvian bark, virginia snake root, camphor and many others; but those enumerated if properly exhibited, and alternately employed will be suffecient to cure the disease.

Opium will be found one of the most efficacious remedies in the typhus state of this fever, if properly prescribed. Its proper exhibition requires the physician to be very attentive to the pulse to prevent its elevating the system into inflammatory action; or to prevent the opium having

a sedative effect on the system. This sedative effect is to be obviated by giving the opium in such a manner that each dose may be exhibited before the stimulating effect of the preceeding dose has subsided.

Distilled & fermented liquors will be found very efficacious if properly given; especially wine and porter. these should be given in pretty large quantity if the state of the system will permit. The peruvian bark, camphor, virginia snake root, and many other stimulants may be employed in succession with advantage.

The external stimulants are blisters cataplasms, and the warm and hot baths. The physician should be very cautious how he uses stimulants in puerperal fever whether he uses them internally or externally; for by not being very attentive he may produce a dangerous or fatal inflammatory action or a degree of

prostration from which the system cannot be raised.

The method most proper of giving stimulants will be to begin with the mildest of them, and be regulated by existing circumstances.

But I may safely say that those medicines which have been enumerated, when employed by a practioner acquainted with his art and attentive to his patient, may be employed with the greatest prospect of affording relief to suffering humanity.